

## Draftguard™ Anti-Rotation Device



Gates Draftguard™ anti-rotation device offers a safe solution for ACHE belt drive systems.

- · Prevents back-drafting of fans
- · Eliminates hard starts during wind-milling
- Avoids damage to belt drive system and structure during start up
- Protects technicians from serious injury during maintenance operations
- Maintenance-free bearings greased-for-life assemblies
- Designed with mounting holes for bushings commonly found on ACHE belt drive systems including QD<sup>®</sup> (E, F and J) and Taper-Lock<sup>®</sup> (3020, 3525, 3535, 4030)
- Adapts to clockwise or counter-clockwise rotation
- Fits within most fan cages or guards without modification





## Gates Draftguard™ Anti-Rotation Device

## Power transmission safety beyond belt guards.

Fan drives, especially air-cooled heat exchanger (ACHE) drives, can spin backwards when fans are off but subjected to air movement across the fan blades. This is known as back-drafting or wind-milling and can be dangerous for two reasons.

First, when the drive is restarted the entire system often experiences extreme shock load. This leads to unnecessary wear of the motor components and can lead to belt breakage or damage to the fan frame.

Second, when it is time for maintenance the drive has to be "wrangled" to a stop and then has to be "locked" so it doesn't move while technicians are in close contact. Without safe measures for both processes the belt drive system becomes further harmed and in extreme cases bodily damage to the technician can occur.



Gates Draftguard prevents fan drives from rotating in the reverse direction. At the core of our product is a high-torque, one-way clutch. The flange plate is engineered to mount to either Taper-Lock® or QD® bushings used in ACHE belt drive systems. The torque arm enables mounting to the frame for complete protection. Draftguard anti-rotation device is flat, allowing it to fit within most fan guards.

Draftguard anti-rotation device is a small investment, mitigating risk to employees and damage to equipment.



Videos, Design Worksheet and Drive Design Manual available at www.gates.com/draftguard

Taper-Lock® is a registered trademark of Reliance Electric QD® is a registered trademark of Emerson Electric



Gates Corporation
1551 Wewatta Street, Denver, CO 80202

1551 Wewatta Street, Denver, CO 80202 www.gates.com